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INFLUENCE OF PSYCHOLOGICAL FACTORS ON THE PROCESS OF PERCEPTION AND ANALYSIS OF INFORMATION IN IT SECTOR

***Abstract.** The article is devoted to the search and identification of the psychological factors influencing the process of perception of information, analysis of internal and external factors as a special case of information-psychological risk, and it also includes the development of methods that reduce the impact of these factors on the possible minimum. The efficiency of technical sector workers directly depends on the socio-psychological climate. Its negative impact may cause psychological problems of varying severity. To avoid this, companies should be interested in restructuring the system that determines the behavioral attitudes and value orientations of the employee.*

***Keywords:** emotional burnout, improving the efficiency, information analysis, perception of information, psychological contract, psychological factors, technical sector.*

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ПСИХОЛОГИЧЕСКИЕ ФАКТОРЫ, ВЛИЯЮЩИЕ НА ПРОЦЕСС ВОСПРИЯТИЯ И АНАЛИЗА ИНФОРМАЦИИ В ИНФОРМАЦИОННО-ТЕХНОЛОГИЧЕСКОМ СЕКТОРЕ

***Аннотация.** Статья посвящена поиску и выявлению психологических факторов, влияющих на процесс восприятия информации в информационно-технологическом секторе. Эффективность работника технического сектора напрямую зависит от социально-психологического климата. Его негативное влияние факторов может вызывать психологические недуги разной тяжести. Во избежание этого компании должны быть заинтересованы в перестройке системы, определяющей поведенческие установки и ценностные ориентации сотрудника.*

***Ключевые слова:** анализ информации, восприятие информации, повышение эффективности, психологический контракт, психологические факторы, технический сектор, эмоциональное выгорание.*

Introduction

In the modern world, mankind spends more resources than ever on meeting information needs. Under such conditions, dependence on information does not seem surprising. Realizing that we live in the age of technologies, many people used to bind their work with them. Frequently, when people make career choice in favor of the technical sector, they have no idea of information technologies impact on their physical and psychological health.

Paying attention to the fact that psychological health is always related to physical health, primarily, the work of the human central nervous system (CNS) should be considered: it has been proven that an overabundance of information has a negative effect on it. Workers in the technical sector can be identified as a special risk group - in addition to regularly meeting information needs, they overload their nervous system with work related to processing, analyzing and structuring information. Overstrain of

the nervous system may lead to the following modern ailments: overwork, stress, emotional burnout and even depression.

Consequently, the informational and psychological impact on the personality directly affects its productivity. Large companies, especially in the technical sector, need to be interested in the mental health of their employees, which directly affects their effectiveness. In other words: they should be able to regulate the level of influence of psychological factors on employees.

1. Susceptibility

Before considering the psychological factors affecting the process of perception and processing of information, it is worth noting that each person is affected in different ways by these factors. Frequently, a weak central nervous system is the main reason.

Excluding the physical features inherent in genetics, the weakening of the nervous system of workers in the technical sector is caused by various factors.

- Working hours.

The average working day in Russian companies is 8 hours, which is 2 hours more than the average daily allowance for working at a computer for an adult. Regular neglect of this norm leads to constant neuropsychic stress. It represents mental and emotional stress due to the degree of tension of the organs of sight and hearing, concentration, volume and distribution of attention, the number of deliberate switching of attention per unit of time, etc.

- Insufficiently equipped recreation areas + work format.

The limit of 6 hours is determined with the condition that there are obligatory breaks for active rest. Many companies neglect the improvement of such zones, as they regard this as only unjustified costs. While the lack of physical activity leads to a decrease in impulses entering the CNS, which leads to a decrease in its tone and a negative effect on the functional state.

- Electromagnetic radiation

Working at a computer, a person is at a sufficiently close distance to the processor, the radiation from which is assessed as follows: at a distance of one meter,

the impact is from 2 to 5 mG, at a distance of 10 cm from the computer and closer, the impact will be from 4 to 20 mG.

Thus, the nature of the work of employees of the technical sector is associated with constant stress on the nervous system, which leads to its inevitable weakening. Consequently, employees of the technical sector are most susceptible to any psychological impact.

2. Types of psychological factors that affect the process of perception and processing of information.

The ability of a person to perceive and process information is influenced by objective (working conditions) and subjective (personal) characteristics. Objective characteristics include all factors that affect a person in the labor process. Factors that have the greatest impact are the following: material working conditions; the state of the production environment; the organization of work and recreation; the form of labor assessment and its stimulation; the social structure of the team, the psychological climate. Personal characteristics include the following: gender; age; work experience; level of requests; compliance of psychophysiological characteristics with the requirements of working conditions.

Objective and personal characteristics are closely related. All of them are formed in the mechanisms of influence of the main psychological factors on the stability of the individual.

- The danger factor determines the psychological specifics of human behavior in stressful situations, is primary. The primacy of this factor is that it increases the impact of other factors.

- The element of surprise. It is manifested in an unexpected change in the conditions for completing the task. There are three types of behavior associated with sudden changes:

- adaptation to new conditions, optimization of the task execution process;
- ignoring new requirements, continuing to perform the task under the old conditions;
- termination of any activity.

- The factor of uncertainty relates to a lack or overabundance of information about the task, the presence of a contradiction.
- The novelty factor is the presence of information unknown to the performer.
- The factor of increasing the pace of actions occurs when the task execution time is drastically reduced. The success of solving problems in such conditions is regulated by the speed and coherence of the team.
- The factor of the lack of time occurs when successful completion of a task is impossible by simply increasing the pace of actions.
- The effect of group emotionality. It is associated with the possibility of emotional infection in situations of extreme danger. It leads to collective nervousness.
- The effect of a professional group. It is expressed by the fact that someone can be partially or completely excluded from collective interaction as a result of psychological / physical injuries, without losing group effectiveness.

These factors affect the emotional stability and performance of a person, and therefore the process of perception and processing of information. Consequently, the psychological factors influencing the process of perception and processing of information consists of these mechanisms of influence. Combining and structuring them, the desired factors are obtained:

1. Psychological climate in the team: stability of group emotionality, the effect of a professional group.
2. Adequacy of assessment and structuring of the tasks to be solved: no time deficit; stable pace of activity.
3. Stability: the exclusion of surprise and novelty, uncertainty.
4. Security: absence of danger.

Conclusion

In addition to the fact that any mental activity is based on stress, and the more obvious the more difficult the task is employees of the technical sector are issues of a number of negative impacts, due to the nature of their work: systematic overstrain of the optic nerve, regular electromagnetic radiation and sedentary mode of work entails an inevitable weakening of the Central nervous system and an increase in susceptibility

to psychological factors that affect the process of perception and processing of information. Thereby, if the first is directly related to a drop in the level of efficiency, then the second should become as a tool of stabilization.

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